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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,614	04/16/2001	Akihiro Murata	109278	3898

25944 7590 07/27/2004

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EXAMINER
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WANG, GEORGE Y

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/834,614

Applicant(s)

MURATA, AKIHIRO

Examiner

George Y. Wang

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11 and 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. This application contains claims 1-10 drawn to an invention nonelected without traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chun et al. (U.S. Patent No. 5,522,002, from hereinafter "Chun") in view of Schenfeld (U.S. Patent No. 6,034,821, from hereinafter "Schenfeld") and Jacobowitz et al. (U.S. Patent No. 5,337,388, from hereinafter "Jacobowitz").

4. Regarding claim 11, Chun discloses a three-dimensional mount assembly (fig. 2, ref. 201) comprising a molded body (fig. 2, ref. 216), a plurality of electronic parts (fig. 2, ref. 207, 208) attached to the molded body, and a plurality of interconnections (fig. 2, ref. 203, 205) electrically connected to the electronic parts and attached to the molded

body such that the interconnections are exposed and face outside (fig. 2, ref. 203, 205) the molded body (fig. 2, ref. 216; col. 6, lines 3-8) that are different from each other.

However, the reference fails to disclose the sealing of the interconnections and the electronic parts to the molded body, and that the exposed surface of the interconnections not extending beyond the plane.

Jacobowitz discloses an optoelectric connector that attaches components by sealing them (fig. 6, ref. 58).

Schenfeld discloses an optoelectric connector with a surface of the interconnections not extending beyond the plane (fig. 1, 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have sealed the electronic parts and the interconnections for attachment to the molded body since one would be motivated to provide permanence to the configuration. The technique of sealing is well known in the art to attach and bond a variety of components together and therefore does not admit novelty. Furthermore, according to Jacobowitz, the permanence of a seal also provides protection from environmental stresses (col. 2, lines 58-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the exposed surface of the interconnections not extending beyond the plane since one would be motivated by geometrical advantages to provide high precision (with tolerances of several microns) connection that can be readily assembled with other components to form devices that are useful in optical systems (col. 1, lines 38-44).

5. As to claim 17-20, Chun discloses the three-dimensional mount assembly (fig. 3, ref. 301) as recited above where each of the electronic parts is an optical device and where the molded body has a hole (fig. 3, ref. 139) for linking an optical section of the optical device. Furthermore, Chun teaches an optical fiber (fig. 3, ref. 308) that provides optical linkage to other optical devices (fig. 3, ref. 107, 116) for optical transmission (fig. 3, ref. 303) via an optical connector (fig. 3, ref. 302) or plug.

6. Regarding claim 21, Chun discloses a three-dimensional mount assembly (fig. 2, ref. 201) comprising a molded body (fig. 2, ref. 216) with a first side by first molded area (fig. 2, ref. 216 left-top) and a second side by a second molded area (fig. 2, ref. 216 front-right), a plurality of electronic parts (fig. 2, ref. 207, 208) attached to the molded body, and a plurality of interconnections (fig. 2, ref. 203, 205) electrically connected to the electronic parts and attached to the molded body such that the interconnections are exposed and face outside (fig. 2, ref. 203, 205) the molded body (fig. 2, ref. 216; col. 6, lines 3-8) that are different from each other.

However, the reference fails to disclose the sealing of the interconnections and the electronic parts to the molded body, and that the exposed surface of the interconnections not extending beyond the plane.

Jacobowitz discloses an optoelectric connector that attaches components by sealing them (fig. 6, ref. 58).

Schenfeld discloses an optoelectric connector with a surface of the interconnections not extending beyond the plane (fig. 1, 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have sealed the electronic parts and the interconnections for attachment to the molded body since one would be motivated to provide permanence to the configuration. The technique of sealing is well known in the art to attach and bond a variety of components together and therefore does not admit novelty. Furthermore, according to Jacobowitz, the permanence of a seal also provides protection from environmental stresses (col. 2, lines 58-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the exposed surface of the interconnections not extending beyond the plane since one would be motivated by geometrical advantages to provide high precision (with tolerances of several microns) connection that can be readily assembled with other components to form devices that are useful in optical systems (col. 1, lines 38-44).

### ***Response to Arguments***

7. Applicant's arguments filed May 10, 2004 have been fully considered but they are not persuasive.

Applicant's amendment included a new limitation that states, "the interconnection has its first exposed end facing outside the molded body." While this new limitation further clarifies the exposed end, it does not overcome the prior art of record. The Chun

reference clearly discloses an interconnection (fig. 2, ref. 203, 205) as recited in the Rejection above with an exposed end facing outside the molded body. Thus, Applicant's amendments and arguments do not place the claimed invention in condition for allowance. Examiner holds to the validity of the references and maintains rejection.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

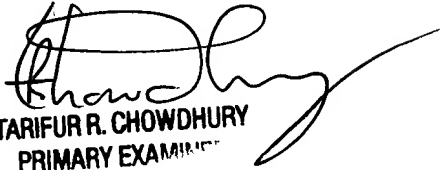
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw  
July 21, 2004

  
TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER